Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.



U. S. DEPARTMENT OF AGRICULTURE.

OFFICE OF EXPERIMENT STATIONS—CIRCULAR 79.

A. C. TRUE, Director.

FORM OF ORGANIZATION FOR MOVABLE SCHOOLS OF AGRICULTURE.

BY

JOHN HAMILTON,

Farmers' Institute Specialist.



WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1908.

LETTER OF TRANSMITTAL.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF EXPERIMENT STATIONS,
Washington, D. C., September 15, 1908.

SIR: I have the honor to transmit herewith and recommend for publication, as a circular of this Office, an outline of a plan for the organization, equipment, and conducting of movable schools of agriculture, prepared by John Hamilton, Farmers' Institute Specialist of this Office.

The need for more effective methods in disseminating agricultural information and the widespread interest manifested by teachers of agriculture and by farming people in this subject have prompted the outlining of a plan in which the methods of teaching found to be successful in class-room work are modified and adapted to use in itinerant instruction. The organization through which this instruction is given is the movable school of agriculture. Schools of this character have been in operation in foreign countries for some years and everywhere with pronounced success. The plan outlined in this circular is intended to provide a form of organization adapted to conditions in the United States and capable of being extended to cover the entire field of agriculture as qualified teachers and sufficient means of support can be secured.

Respectfully,

A. C. TRUE,

Director.

Hon. James Wilson, Secretary of Agriculture.

(2)

[Circ. 79]

FORM OF ORGANIZATION FOR MOVABLE SCHOOLS OF AGRICULTURE.

Those in charge of agricultural education in the United States are rapidly coming to realize that they are under as great obligation to supply instruction in agriculture to the masses of agricultural people out on the farms as to the favored few who are fortunate enough to be listed in classes in colleges and schools. This is a complete change of view from that which formerly prevailed.

This change is chiefly due no doubt to the fact that a large amount of valuable scientific information respecting agriculture has been collected in recent years, and to the important discovery that it is possible to teach the practical application of agricultural science to men and women who have never had more than quite limited opportunities for scientific study.

The need for such instruction has long been felt by rural people, and agricultural colleges and schools, departments, boards and local societies of agriculture, fair associations, farm clubs, granges, institutes, and agricultural journals are among the forms of activity that efforts to supply the need for agricultural information have brought into existence.

Within the past few years, however, educators have come to realize that more systematic and better directed efforts are needed for securing the dissemination of agricultural information among farming people than have yet been in use.

AMERICAN ASSOCIATION OF FARMERS' INSTITUTE WORKERS.

At the annual meeting of the American Association of Farmers' Institute Workers held at Baton Rouge, La., in November, 1906, and as the result of a report by its standing committee on movable schools of agriculture, the following resolution was unanimously adopted:

Resolved, That this association, appreciating the importance of providing more systematic and extended instruction in agriculture in the farmers' institutes, hereby expresses its approval of the use of the movable school of agriculture as an instrument for this purpose.

The committee in presenting its report made the following statement:

The institutes, at least in the States in which they have been longest conducted, have brought the majority of country people to appreciate the value of the truths that agricultural science has to teach. The next duty, therefore, is to demonstrate the practicability of imparting these truths with sufficient particularity, adaptation, and extent to be of substantial benefit to the working farmer in increasing his earning power.

The movable school promises to provide such a demonstration. It deals with a single item or subject in agriculture, and it deals with it both in a theoretical and in a practical way. It explains the theory and then teaches by doing. * * *

The movable school is first of all a carefully prepared course of study extending over sufficient time to teach the subject thoroughly and render the student familiar with the practice work which the course prescribes. It is given to classes regularly organized and limited in number, whose members agree to complete the course. It is equipped with all of the apparatus, books, and material needed for presenting the subject in a most thorough manner, and is conducted by a teacher who is an expert in expounding and illustrating the theory of the subject and in directing the practical features of the study. The students are men and women of mature years, and of experience in the direction in which the instruction is to be given, having sufficient preliminary education to enable them to understand and participate intelligently in the requirements of the course.

ASSOCIATION OF AMERICAN AGRICULTURAL COLLEGES AND EXPERIMENT STATIONS.

At the time and place at which the foregoing report was submitted a standing committee on extension work of the Association of American Agricultural Colleges and Experiment Stations made a similar report to that association, giving the results of its investigation into the status of agricultural extension teaching in the United States. In presenting its conclusions the committee used the following language:

It seems evident to the committee that the time has arrived for a much more complete organization of extension teaching in agriculture. Only a few institutions have thus far attempted any such organization, but the work is so important, and so much of it, although in rather a desultory way, is being accomplished, that the need of concentrating, systematizing, coordinating, and developing the more important aspects of extension teaching, particularly in our land-grant colleges, becomes clearly apparent. Your committee would recommend—

(1) That each college represented in this association organize as soon as practicable a department of extension teaching in agriculture, coordinate with other departments or divisions of the agricultural work, with a competent director in charge and if possible with a corps of men at his disposal. * * *

(2) If in case of any agricultural college this step is at present impracticable, we would recommend most strongly that the college appoint a faculty committee on extension teaching in agriculture.

These two reports, the result of painstaking investigation conducted by committees selected for the purpose, not only show the deep interest which educators are taking in the education of rural

people, and are consequently deserving of most careful consideration by those in charge of agricultural education in the United States, but they also show the need there is for specific outlines of wellconsidered methods to carry into effect in a practical way the suggestions that the committees have made.

NEED OF A WORKING SYSTEM.

A number of the agricultural colleges and several of the farmers' institute organizations throughout the country have undertaken to carry out the recommendations that have been offered. In doing this, however, there has been little or no coordination of effort or unity of method, but each institution has taken up the work in its own way, with the result that great diversity exists, and along with this there are the usual accompaniments of misdirected effort and the consequent failure to reach satisfactory results.

The prominent defects in meetings of a peripatetic character for agricultural instruction in this country have been: (1) Too many subjects; (2) too large classes; (3) too little time devoted to instruction in a locality, and (4) too little work by the scholars.

The movable school of agriculture is designed to correct these defects.

With a view to aid in securing a working system upon which all can unite, the following brief outline of a method for conducting movable schools of agriculture has been prepared. The main features presented in this outline have been successfully applied in similar work in foreign countries. In offering the suggestions the conditions that exist in rural communities throughout the United States, and also the facilities at hand on the part of the educational institutions in this country for carrying out the scheme, have been kept in mind.

FORM OF ORGANIZATION.

The plan proposed for movable schools of agriculture consists in organizing the farmers of a community over 19 years of age, who have had good common-school training and some practical experience in the direction of the subjects taught, into classes for instruction in agriculture, no class to consist of less than eight, nor in any case to exceed fifteen persons. Before a school is opened in a locality written pledges are required of the members of the class that they will pay the tuition fee charged, attend all of the lectures, and perform all of the practice exercises that the school prescribes. Also a guaranty from the locality that there shall be provided free of cost to those sending out the school a suitable hall for holding the meetings, with heat, light, water, janitor service, laboratory room with desks, and material for illustration.

METHOD OF STUDY.

The schools are organized for the study of scientific and economic methods for the growing of crops, the breeding and care of animals, and the general improvement of agriculture. Each "course" is to be confined to a *single* subject, as cheese making, butter making, fruit growing, market gardening, farm organization, poultry rearing, etc.

The method of discussion is to be from the product back to the forces that produced it, or the reverse of that in use in long course work in college. Soils, for example, will not be studied as such, but only incidentally as factors in the growing of crops. Fertilizers will not be studied as such, but certain plants, and then the fertilizers necessary to their growth. Vegetable physiology will not be studied as such or in its entirety, but as it relates, and only so far as it relates, to the plants or crops which at the time are subjects of study. There is not sufficient time for study by the other method.

LENGTH OF TERM.

The duration of the school term is from one week to two months, according to the character and importance of the subject studied. The purpose is to equip ten or fifteen persons in each community with information that will enable them to improve in their locality the branch of agriculture which the school represents.

LENGTH OF COURSE.

Each course may be continued over three or four successive seasons, as for example:

A dairy husbandry course.

First year-Butter making.

Second year—Cheese making.

Third year-Milk production.

A domestic science course.

First year—Preparation of cereal or starch foods.

Second year—Preparation of animal foods.

Third year—Preparation of fruit and vegetable foods.

Fourth year—Household economy, kitchen gardening, etc.

A course for country school-teachers.

First year—Nature study teaching.

Second year—School gardens and grounds.

Third year—School architecture and sanitation.

At the completion of each course a certificate is given to students passing a satisfactory examination before a committee of agricultural experts.

The examinations are:

- (1) Oral.
- (2) Written.
- (3) In practical manual exercises.

[Circ. 79]

THE TEACHING FORCE.

Each school is in charge of an expert teacher with an assistant. The teacher is selected for his special knowledge, both theoretical and practical, of the subject to be taught, and for his ability to impart the information in a forceful and effective manner.

Qualified instructors should be employed also for teaching other subjects not strictly agricultural, as building construction, farriery, agricultural law, veterinary science, bookkeeping, farm economics, farm mechanics, farm hygiene, etc.

DISTRIBUTION OF THE INSTRUCTOR'S TIME.

The schools are to be held during the least busy season of the year. This of course varies in different localities, according to the nature of the crops produced and climatic and economic conditions.

During the period when no schools are held the instructors visit farms and give advice; inspect markets and report on them; visit rural schools, lecture, and lay out school grounds, gardens, etc.; establish and oversee demonstration plats; organize farm clubs, classes for movable schools, reading and study clubs, boys' and girls' clubs, etc.; establish vegetable and flower gardens in county-fair grounds; attend picnics; introduce circulating libraries; and look up students for the agricultural colleges, etc.

EQUIPMENT.

The apparatus and equipment for each school are to be of the best, and of a kind that will fully illustrate the various points that the teacher presents. They should be sufficient in amount to enable each scholar to participate in all of the practice exercises that the course prescribes. A library containing several duplicates of each of the authorities referred to by the lecturer is to be provided for use in reference and reading work.

METHOD OF CONDUCTING THE SCHOOL.

The teaching is oral, to be accompanied by reading and practice exercises. The plan contemplates one lecture each day by the principal teacher in charge. Upon its completion the instructor provides each student with a syllabus of his lecture containing a list of references to authorities with pages and paragraphs noted, whereupon the students are required to spend the following two hours, or so much of the time as is necessary, in looking up these references and authorities. The reading is to be followed by a practice exercise where the students will be required to engage in doing the things that the lecturer has announced, in verifying the statements made by analysis in the laboratory or by practical demonstration in the stable or field.

DAILY SCHEDULF

The daily schedule proposed is:

Forenoon—9 to 10, lecture by the professor in charge. Forenoon—10 to 12, consulting references and reading up authorities. Afternoon—1 to 4, practice exercises in the laboratory or in the field.

HOME STUDY AND PRACTICE.

During the period in which the school is in operation arrangements are to be made with each student for continuing in a practical way, at his home, throughout the year, the operations which the school represents, according to plans and specifications outlined by the teacher in charge. Whether the subject be poultry rearing, field, orchard, or garden culture, or other line of work, the student is required to continue it during the year, to keep careful record of the various operations as they occur, and report the results from time to time as the work progresses.

PRACTICAL RESULTS.

It is believed that schools of this character will have an immediate effect in increasing agricultural production and at the same time interest a large number of people in the general betterment of rural conditions wherever such schools are held, and that they will also eventually become a recognized part of the system of public instruction, and by providing permanent employment for itinerant teachers, will open up a new field of effort for capable men and women in rural education and improvement. Such a system of schools will also induce agricultural colleges and other higher institutions of learning to introduce into their teaching special or normal courses to fit teachers for giving the instruction in agriculture which the itinerant schools are organized to impart.

SAMPLE COURSES OF STUDY.

In order that there might be at hand some general guide, showing in itemized form the method proposed, three sample courses of study for movable schools of agriculture have been prepared under the direction of the Office of Experiment Stations of the United States Department of Agriculture, one on cheese making, one on fruit culture, and another upon the preparation of cereal foods. These publications can be had either upon application direct to the Division of Publications of the Department or through the Office of Experiment Stations.

[Circ. 79]